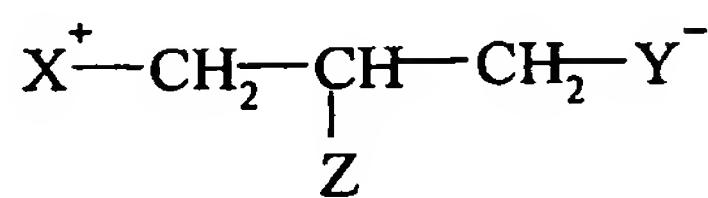


**CLAIMS**

1. The use of a compound of general formula (I):

5



(I)

wherein  $X^+$  is selected from the group consisting of  $\text{N}^+(\text{R}_1, \text{R}_2, \text{R}_3)$  and  $\text{P}^+(\text{R}_1, \text{R}_2, \text{R}_3)$ , wherein  $\text{R}_1$ ,  $\text{R}_2$  and  $\text{R}_3$ , which are the same or different, are selected from the group consisting of hydrogen and  $\text{C}_1\text{-C}_9$  straight or branched alkyl groups,

- $\text{CH}=\text{NH}(\text{NH}_2)$ , - $\text{NH}_2$ , - $\text{OH}$ ; or two or more  $\text{R}_1$ ,  $\text{R}_2$  and  $\text{R}_3$ , together with the nitrogen atom which they are linked to, form a saturated or unsaturated, monocyclic or bicyclic heterocyclic system; with the proviso that at least one of  $\text{R}_1$ ,  $\text{R}_2$  and  $\text{R}_3$  is different from hydrogen;

15 Z is selected from

- $\text{OR}_4$ ,
- $\text{OCOOR}_4$ ,
- $\text{OCONHR}_4$ ,
- $\text{OCSNHR}_4$ ,
- 20 - $\text{OCSOR}_4$ ,
- $\text{NHR}_4$ ,
- $\text{NHCOR}_4$ ,
- $\text{NHCSR}_4$ ,
- $\text{NHCOOR}_4$ ,
- 25 - $\text{NHCSOR}_4$ ,
- $\text{NHCONHR}_4$ ,
- $\text{NHCSNHR}_4$ ,

-NHSOR<sub>4</sub>,  
-NHSONHR<sub>4</sub>,  
-NHSO<sub>2</sub>R<sub>4</sub>,  
-NHSO<sub>2</sub>NHR<sub>4</sub>,  
5 -SR<sub>4</sub>,

wherein R<sub>4</sub> is a C<sub>2</sub>-C<sub>20</sub> saturated or unsaturated, straight or branched alkyl group;

Y- is selected from the group consisting of -COO-, PO<sub>3</sub>H-, -OPO<sub>3</sub>H-, tetrazolate-5-yl;

10 salts, enantiomers and racemic mixtures thereof, for the preparation of an antitumor medicament.

2. The use according to claim 1 of a compound of formula (I), wherein, independently of one another,

- X is trimethylammonium or a group N+(R<sub>1</sub>, R<sub>2</sub>, R<sub>3</sub>) wherein two or more R<sub>1</sub>, R<sub>2</sub> and R<sub>3</sub>, together with the nitrogen atom which they are linked to, form a heterocyclic system, which is selected from morpholinium, pyridinium, pyrrolidinium, quinolinium and quinuclidinium;
- R<sub>4</sub> is selected from heptyl, octyl, nonyl, decyl, undecyl, dodecyl, tridecyl, tetradecyl, pentadecyl, hexadecyl, heptadecyl, octadecyl, nonadecyl and eicosyl;
- Z is a ureido (-NHCONHR<sub>4</sub>) or carbamate (-NHCOR<sub>4</sub>, -OCONHR<sub>4</sub>) group.

3. The use according to claim 2 of a compound which is selected from the 25 group consisting of

- R,S-4-trimethylammonium-3-(nonylcarbamoyl)-aminobutyrate;
- R,S-4-quinuclidinium-3-(tetradecyloxycarbonyl) -oxybutyrate;
- R,S-4-trimethylammonium-3-(nonylcarbamoyl)-oxybutyrate;

- R,S-4-trimethylammonium-3-(nonyloxycarbonyl)-oxybutyric acid chloride;
- R,S-4-trimethylphosphonium-3-(nonylcarbamoyl)-oxybutyrate;
- R,S-4-trimethylammonium-3-(octyloxycarbonyl)-aminobutyrate;
- 5 - R,S-4-trimethylammonium-3-(nonyloxycarbonyl)-amino butyrate;
- R,S-4-trimethylammonium-3-octyloxybutyrate;
- R,S-4-trimethylammonium-3-tetradecyloxybutyrate;
- R,S-1-guanidinium-2-tetradecyloxy-3-(tetrazolate-5-yl)-propane;
- 10 - R,S-1-trimethylammonium-2-tetradecyloxy-3-(tetrazolate-5-yl)-propane;
- -R,S-3-quinuclidinium-2-(tetradecyloxycarbonyl)-oxy-1-propanephosphonate monobasic;
- -R,S-3-trimethylammonium-2-(nonylaminocarbonyl)-oxy-1-
- 15 propanephosphonate monobasic;
- R,S-3-pyridinium-2-(nonylaminocarbonyl)-oxy-1-propanephosphonic acid chloride;
- R-4-trimethylammonium-3-(tetradecylcarbamoyl)-aminobutyrate;
- R-4-trimethylammonium-3-(undecylcarbamoyl)-aminobutyrate;
- 20 - R-4-trimethylammonium-3-(heptylcarbamoyl)-aminobutyrate;
- R,S-4-trimethylammonium-3-(nonylthiocarbamoyl)-aminobutyrate;
- R-4-trimethylammonium-3-(nonylcarbamoyl)-aminobutyrate;
- S-4-trimethylammonium-3-(nonylcarbamoyl)-aminobutyrate;
- 25 - S-4-trimethylammonium-3-(tetradecylcarbamoyl)-aminobutyrate;
- R,S-4-trimethylammonium-3-tetradecylaminobutyrate;
- R,S-4-trimethylammonium-3-octylaminobutyrate;
- R,S-4-trimethylammonium-3-(decansulfonyl)aminobutyrate;

- R,S-4-trimethylammonium-3-(nonylsulfamoyl)aminobutyrate;
- S-4-trimethylammonium-3-(dodecansulfonyl)aminobutyrate;
- R-4-trimethylammonium-3-(dodecansulfonyl) aminobutyrate;
- S-4-trimethylammonium-3-(undecylsulfamoyl)aminobutyrate;
- 5 - R-4-trimethylammonium-3-(undecylsulfamoyl)aminobutyrate;
- R-4-trimethylammonium-3-(dodecylcarbamoyl)aminobutyrate;
- R-4-trimethylammonium-3-(10-  
phenoxydecylcarbamoyl)aminobutyrate;
- R-4-trimethylammonium-3-(trans-b-  
10 styrenesulfonyl)aminobutyrate

4. The use according to claim 3, of the compound R-4-trimethylammonium-3-(tetradecylcarbamoyl)-aminobutyrate.

5. The use of a compound (I) according to claims 1-4 for the preparation of an antitumor medicament for the treatment of leukaemias and  
15 hepatocarcinomas.

6. A therapeutic preparation containing a compound according to anyone of claims 1-4 in combination with an antitumor agent selected from cytotoxic or cytostatic compounds, antimetabolites, hormone antagonists, alcaloids, antibiotics, in particular antracyclines, alkylating agents, peptides, agents  
20 modifying the biological response, cytokines, for simultaneous separate or sequential administration to a tumor patient.

7. A preparation according to claim 6, containing a combination of a compound according to anyone of claims 1-4 and an antracycline.

8. A preparation according to claim 7, wherein the antracycline is  
25 doxorubicin.